

Interplanetary Stories

VOL. 3.
No. 4.

WONDER

STORIES

QUARTERLY

SUMMER
1932

WONDER

Stories
Quarterly

HUGO GERNSBACH Editor

SUMMER
1932



"The Menace From Mercury"
by Raymond Gallum

Other Interplanetary Stories
By

JOHN S. CAMPBELL

LAURENCE MANNING

FRANK R. KELLY

50
CENTS



Wonder Stories Quarterly

PUBLICATION OFFICE:
404 North Wesley Ave., Mt. Morris, Ill.

Published by

STELLAR PUBLISHING CORPORATION

H. GERNSBACK, Pres.

I. S. MANHEIMER, Sec'y

S. GERNSBACK, Treas.

Vol. 3

No. 4

Summer

1932

Table of Contents

BEYOND PLUTO

By John Scott Campbell 438
As exiles from earth they went into the great unknown, to meet mysteries of other worlds . . .

EXILES OF MARS

By Frank A. Kelly 484
Lone protectors of a planet, they faced the thirst-maddened desert hordes . . .

REBELLION ON VENUS

By John Bertin and Edward Morris 494
Based on the Prize Winning Interplanetary Plot.

THE VOYAGE OF THE ASTEROID

By Laurence Manning 508
As discoverers they ventured into space, to bow to the elements on an unknown world . . .

THE MENACE FROM MERCURY


By Raymond Gallun and John Michel 544
Based on the Prize Winning Interplanetary Plot.

THE JOVIAN HORDE

By Al. H. Martin 554
Bestial hordes from Jupiter, they came seeking blood and power . . .

OUR COVER ILLUSTRATION

from Raymond Gallun and John Michel's "The Menace from Mercury" shows our hero from the earth dashing his ship against the tower of Mercury in an attempt to destroy the force that is causing the planet to disintegrate. His friend the Martian has just caught him on the jo-jo and is attempting to pull him to safety.



WONDER STORIES QUARTERLY—Entered as second-class matter September 13, 1929, at the Post Office at Mount Morris, Illinois, under the act of March 3, 1879. Title registered U. S. Patent Office. Trademarks and copyrights by permission of Gernsback Publications, Inc., 98 Park Place, New York City, owner of all trademark rights. Copyright, 1932, by Gernsback Publications, Inc. Text and illustrations of this magazine are copyrighted and must not be reproduced without permission of the owners.

WONDER STORIES QUARTERLY is published on the 15th day of September, December, March and June, 4 numbers per year. Subscription price is \$1.75 a year in United States and its possessions. In Canada and foreign countries, \$2.00 a year. Single copies 50c. Address all editorial communications to Editor, WONDER STORIES QUARTERLY, 98-98 Park Place, New

York. Publishers are not responsible for lost MSS. Contributions cannot be returned unless authors remit full postage. WONDER STORIES QUARTERLY is for sale at principal newsstands in the United States. Printed in U. S. A. IF YOU WISH TO SUBSCRIBE TO WONDER STORIES QUARTERLY, make out all remittances to the Stellar Publishing Corp. Be sure to mention the name of magazine you wish to subscribe for, as we are also agents for the following magazines: RADIO-CRAFT and WONDER STORIES. Subscriptions can be made in combination with the above publications, at a reduced club rate. Ask for information. Subscriptions start with current issue. WHEN YOUR SUBSCRIPTION EXPIRES, we enclose a renewal blank in the last number. No subscriptions continued unless renewal remittance received. Change of address: Always give us old as well as new address and notify us as far in advance as possible.

STELLAR PUBLISHING CORPORATION

Publication Office, 404 N. Wesley Ave., Mt. Morris, Illinois. Editorial and General Offices, 98-98 Park Place, New York City

London: Hachette & Cie.,

3 La Belle Sauvage, Ludgate Hill, E. C. 4

Paris: Hachette & Cie., 111 Rue Reaumur

Australian Agent: McGill's Agency

179 Elizabeth St., Melbourne



EXILES OF MARS

By Frank K. Kelly



(Illustration by Paul)

Silver and green fire seemed to mushroom out of the sand to brush away with hungry fingers dozens of the savage figures. A gap opened in the lines of the raiders . . .

EXILES OF MARS

by the author of "Red April 1965,"
"The Radium World," etc.

THE sun sank slowly down beneath the crest of razor-backed hills, its last long rays spilling out over the desert in a golden flood of light. Great piled dunes of scarlet sand took up the faint crimson beams and cast them back and forth in flashing cascades of eery brightness . . . They faded, vanished. Night, sudden and complete, dropped with soundless speed over the desert. Over the edge of the distant hills the racing moons of Mars swiftly rose, spilled pale light down over the sand. A faint wind came, and brushed along the dunes with light fingers, whispering . . .

Armiston made a savage motion of despair, and tore his eyes away from the bleak scene. His hands clenched hard at his sides, whitened knuckles showing through brown skin. He turned, walked away from the huge glassite dome-port set like a great round eye in the smooth black metal of the tower wall.

His glance swung over the stark bareness of the tower room; the little stellite-glazed table; the five stiff-backed, metal-bound chairs; the narrow record-cases ranged along one wall, stacks of film-spools faintly glimmering in the dim light.

All of it sterile and dead as the desert outside, typical of the grim reality of the Tower Station, sole supply of the eca-radium that was man's greatest weapon in the never-ending fight against Cancer Four.

Armiston's eyes caught the straight, taut figure still standing beside the great dome-port, and tightened with sudden bitter anger.

"Good God, R. G.! Quit standing there with that accursed grin of yours! You can't—like this! I can't stand much more of it, myself. Oh, damn it! It's driving me—completely mad! A little more and I'll—"

The older man turned sharply from the lookout port, sudden concern in straight grey eyes. The little smile of fascination that had crinkled up his long, firm lips vanished into a half-frown. He came over to where Armiston was sitting slumped in a chair, head on folded arms. His hand caught Armiston's shoulder in a grip that made the younger man wince.

"Cut that, Bob! Come out of it! You've got to be a

man! I think I know how you feel—but it's too late now, old fellow. You should never have come here. I realize that. It was a mistake all around. Why did you?"

Armiston raised his head slowly, met the grave eyes. He shrugged, shoved back drooping shoulders.

"I was a damned fool, R. G. A fool. It was a woman, of course. In Korna. I thought I loved her—I thought there was nothing left for me after she—tired of things . . . Nothing except this. So I volunteered. They wanted one man. They took me." Weber nodded, gravity masking pity in his eyes. A queer, pale-white scar along the line of his jaw throbbed a little, as at a vague, distant memory . . . He said quietly, his hand on Armiston's shoulder:

"I see. I'm sorry, Bob. I wish there was some way I could—send you back, but I suppose you know that once here . . . Always here."

The bitterness and despair came back behind Armiston's eyes. "I know. That's the hell of it. Good God, the thing's monstrous! To let us sit here—rotting! Why do they condemn us to *this*? It's inhuman!"

"No," Weber said unwaveringly, his voice like a bared sword.

"It is very human, Bob. It is for all humanity—on whatever world it may be. You know why we are here . . . Have you ever seen a case of Cancer Four? Then you know what I'm talking about. Eca-radium, sealed in capsules of entonium-isotope, is the only hope, once you've got it. Somehow, the radiation of the eca counteracts the slow destruction of tissue caused by the infection . . . With eca-radium, you live; without it, you die—an undescrivable death.

"That's why we're here, Bob. Just four of us; the Council would condemn no more to certain death. And no more are need-

ed, with the equipment here, and the Guards to help us . . . You understand, Bob?"

"Yes," Armiston said slowly, his eyes queer. "Yes . . . What happened to the man before me?"

Weber looked at him. "He lost his grip. Tried to get away. They caught him before he'd gone half a mile . . . Do you want me to tell you any more?"



FRANK K. KELLY

OF ALL the solar planets, Mars is perhaps the most intriguing. The pictures we have of it—as a great desert, alternating with spells of torrid heat and frigid cold—make of it a place where stirring adventures may take place.

The climate of Mars may give rise to strange forms of vegetation and stranger animal life, and when we come in contact with such life much fur will fly.

The present story is original, for it pictures no interplanetary war, and no attempts at world or even planetary conquests. It deals, in fact, with the brute struggle with nature; with such elemental things as thirst and disease. And back of this struggle, in which a handful of men represent civilization, we find all of the best qualities in man: his bravery, his fighting will, his willingness to sacrifice himself for his race. Such qualities are those that have always been developed in pioneers, as Mr. Kelly points out in this absorbing story.

"No," Armiston said quietly. "No. I understand what you mean—perfectly."

Weber looked at him, eyes grave and direct. "I hoped you did. I wouldn't want anything to happen." His voice died.

Armiston straightened, made as if to speak again, but at that instant a bell tinkled musically in the wall behind them; and a panel slid back into smooth metal, revealing a square of smooth vibra-screen. A man's face sprang with startling suddenness out of the vague shadows—a narrow, aquiline face with grave, luminous dark eyes, queerly outlined against a strange-shaped head covering of crimson metal fabric. The man spoke, his voice husky:

"Greetings, R. G. You two're on. Come down on Car V-7. Number 8's cut off for a while; Council orders. They want everything we give them—and more. I think something's up."

WEBER nodded slowly, his face grave. A sudden uneasiness rose behind his eyes at a brief thought, and was crushed down. "What have you been running, Ta?"

The other glanced at a narrow strip of metal fabric tape in one black-gloved hand. "Ninety tubes AC-9* per minute; other stuff running all the way up to two hundred. Things must be bad—back in Korna."

"Yes. They must be."

Weber nodded again, the tense lines in his face deepening. He shuddered, remembering the carnage of the epidemic of Cancer Four** three years in the past. "I see. Cut off. We'll be right down."

The other waved a hand in an affirmative motion, cast a single, hard searching glance at Armiston's white face, and cut off. The screen darkened; the panel slid down into the wall again.

Armiston forced a tight smile. "I saw that too, R. G. You needn't worry. I'm not going to crack up—for a while yet."

Weber grinned; his face underwent a queer change in the process, breaking up into little fine lines and furrows, the white scar dissolving in a luminous glow. He looked queerly human.

"That's the talk I like to hear from you, Bob! Let's go! While there's life, there's hope!"

"Yes," Armiston said, with a queer twitching of his mouth. "Yes. Except here."

Weber said nothing more. They crossed the room together, pressed a stud in the polished metal of the wall. A panel opened soundlessly before them, revealed the softly lighted interior of the lift car.

They stepped in together; something mechanical made a soft purr, and the panel closed. The car slid into silent motion. They sank swiftly downward.

At the bottom a second panel opened from the smooth wall of the lift shaft—opened into a narrow, air-tight box of a room lined with doubly-thick coatings of black insulating-metal*** Ungainly metal fabric suits lay on

narrow benches against one wall; beside them perfectly fitting masks of dull crimson huddled shapelessly.

Armiston and Weber climbed into the suits in silence; slid the scarlet masks down over their heads, buckled connections fast—then surveyed each other through the translucent substance of the red metal fabric. They looked like a pair of weird metal monsters, hooded over with the scarlet masks.

Weber went to the vibra-tooth inset into the opposite wall, and angled for visual connection with Ta-Rigo, the man who had summoned them from above. Presently he answered, from a dim-lit booth in the cavernous vastness of the generating room; he showed long teeth in a white smile. He made a motion; brought his sister, Ona, into view for a flashing instant, then waved gaily at Weber.

"All well, R. G. Come out."

Inexplicably, but as always, Armiston's body was shaking. A sudden revulsion swept over him; O God, how he hated all this! And now—to go out into that hell of monstrous industry for another gruelling age of dull, unceasing torment! He couldn't stand it—he couldn't!

Beads of cold sweat broke out on his face, coursed in little rivulets down past his chin . . . Then suddenly he glimpsed, just for an instant, the bravely smiling oval of the girl Ona's face—and fear left him, was crowded into the dark corners of his mind. If this little Martian girl could stand it, he could.

Weber pressed a stud in the thick metal wall of the room; a great panel opened before them, disclosed a narrow box-like chamber, triply reinforced by layers of the black metal—the entrance-lock! Together, Weber and Armiston stepped into the lock; the panel closed silently after them.

After a brief instant, the wall before them seemed to fade away, and the two men crossed swiftly over the threshold of the lock, and found themselves standing on a narrow cat-walk, staring down into the Room of Rays . . .

Armiston stared, as always, with a fascinated wonder: Already his body trembled to the dull, aching impact of swirling vibrations. His eyes swept over the dim, towering masses of whirling, clicking machinery; they ran on to banked rows of super-photocells, silently storing in vast reserves of energy from the sun-mirrors spread in mighty network on the desert above; they leaped along coiled lines of condensers and gently whirling drums and clicking motor switchboards—and found at last the things upon which all this vast activity was centered: the ray tubes!

Great, towering masses of fused quartz, ranged in two great ordered circles about the central generating chamber, the tubes lanced upward giant-like into the dimness of the huge room's roof. Constant flame, the white coruscation of 20,000,000 volts bridged the gap between the glowing hot points of huge stellanum electrodes; leaped out in narrow white fingers toward the thin metal shield guarding the tubes' farther edge; they poured a scintillating cascade of power over into the central chamber of the whole vast system—whirling electronic streams, bombarding with terrific force the heavy atoms of the ectoranium in the center of the chamber.

ALL that vast outpouring of energy, gathered from the sun-mirrors on the desert above into the photocells, intensified by the battering action of the tubes, pouring out upon the great block of dully gleaming blue-green metal that lay in the middle of the central-chamber—pure ectoranium, element 94, broken down by the titanic action of the electron stream into precious pools of eca-radium, most valuable derivative of radium!

Slowly, trickles of glowing white liquid dropped down from the great block of metal, flowed sluggishly out

*AC-9. The tubes of eca-radium were in varying sizes, ranging from one hundredth of a gram up to nine-tenths. AC-9 then, indicated that the tube contained nine-tenths of a gram of eca-radium. AC was the chemical symbol adopted for eca-radium.

**Cancer Four—The disease was so called because it was believed to have originated on Mars, fourth planet of the solar system. Infection by it meant a slow, inexorable tearing-down of the body tissues, resulting in a lingering death. Terrestrials were especially affected.

***Insulating-metal. An alloy of metal isotopes of lead and zinc. The suits worn by Weber and Armiston also were made of this material, which was the best-known protection against the deadly short rays released in the process of breaking down the atoms of Element 94 into eca-radium. The red color of the head coverings was caused by the addition of another metal which, rendering the masks translucent, was adapted to the face. No known metal completely shut out the incessant torrent of short waves.

through narrow vents of triply-braced zinconium* into narrow tubes of crimson metal.

Laboring robot arms came down from the dim bulk of nearby machines. They caught the tubes, sealed them white-hot, thrust them swiftly into the openings of repulsion-tunnels, to be caught up into the never-ceasing stream of tiny projectiles hurtling half across Mars to the receiving depots of Korna. There they would be shipped by tube and helicopter and rocket-liner, to the massed cities of the Federated Worlds—strong allies in the incessant war on Cancer 4, dreaded scourge of the solar system.

A sudden thrill rocked Armiston's soul for one delirious instant; no man gave better service to the worlds than these four bitter exiles who labored here in the subterranean pits of the rays, submitting uncomplainingly to the slow rotting death of ray-infection! Weber, the Chief—Ta-Rigo—Ona—and now Armiston! Four names known and revered the system over!

In a sudden glow of vicarious martyrdom, he swung down the catwalk by Weber's side, took his place beside the older man at the great central-control towers that looked out over the vast room. He was even able to wave gaily at Ona as she passed him, tired and pale, going down to the entrance lock . . . The girl smiled back tremulously and Armiston's heart was suddenly warm. Then she was gone . . .

Monotony . . . Dull, aching monotony, throbbing with the intangible, creeping menace of fingering short rays—sitting before the complex, winking vastness of a huge switchboard, strapped to the hard metal of a seat—held down, helpless . . . Only able to reach out tired, metal-gloved fingers, and fling a switch over at the warning of a scarlet flash; pull it back at the winking glow of emerald green . . . Armiston felt himself slowly going mad . . .

Weber, sitting three feet away from him, eyes fascinated by the creeping, clicking, thundering, sobbing rhythm of the great mechanisms scattered over the room, each one a smoothly-working cog in a vast hole . . . Weber, brain afire with a queer sensation of uncanny ecstasy, realized that the rays were conquering him. That slowly, inexorably, they were eating through the thinner protective covering of crimson metal over his head, fingering down savagely into his brain, sending him an unmistakable warning of—death . . .

He wondered if, after all these years of this, he was going mad . . . What did the Martians call this vast bleak Desert whose heart held the room of rays? En-o-Dah—En-o-Dah. The Desert of Lingering Death . . .

He glanced across once at Armiston, and sat up sharply, deep alarm behind his eyes.

Armiston was slowly cracking—breaking up under the constant onslaught of the rays, even though his time here was measured in days, and Weber's was in years . . . Something—he'd have to do something about that . . . Why was it so hard to think? Why did his brain feel weighted with lead, barely able to move with creeping thoughts? He knew, and fought frantically to keep from succumbing to the insidious madness that lived in him. More depended on him and on Armiston than saving their own lives. Three worlds called unceasingly to fight the unseen, uncanny menace of Cancer Four . . . If he failed now, and Armiston went down in madness . . .

He shook his head sharply to clear his brain, reached down and unstrapped himself from his control-board, glanced down once at the quiet surface of his switch panel, and hurried across the narrow catwalk between the control towers.

His metal gloved fingers closed hard on Armiston's

shoulder; he shoved his face down close to the younger man's.

"Come out of it, you snivelling fool! You've got to stick! I won't let you go mad! You don't get out of things as easily as that! If you've got an atom of guts in your filthy body . . ."

"That's enough, R. G.," Armiston said through white lips; he waved a hand feebly. "Go on back. I'm—right as rain, now. It—just comes on me in—waves. Gone now. Get—back."

Weber stared at him a minute, eyes focused in a long, searching glance; then gave his shoulder a fierce grip and was gone. Nothing else happened on their shift after that . . .

A bell rang in deep, sonorous tones suddenly, its throbbing sound reaching even through the hollow thunder of the machines in the great room.

CHAPTER II

The Coming of the Vandals

ARMISTON started, forced moist lips to split into a thankful, tight-lined smile. Shift over! Hours and hours now of rest, and comfort, and thinking . . . That was the worst—thinking . . .

He rose stiffly, stared out over the room, eyes fastened on the narrow platform, jutting out from the outward face of the entrance-lock. The panel opened; two black-clad, crimson-hooded figures came toward them, laboring up spidery lengths of metal ladder, clambering close . . . Ta Rigo and Ona stood presently beside them, panting a little. Ta Rigo waved a gay hand; nothing seemed to affect this tough-skinned, keen-witted little Martian. But the girl looked tired.

"How goes it, my friends? . . . Still—ninety, R. G.?"

Weber nodded gravely. He was himself again—master of the insidious fear that lived in all of them.

"Still ninety. I'm afraid something's up in Korna. Ona, you look tired. Let me take the first half of this watch. You go on up with Bob."

The girl flushed indignantly, forced stiff lips to move in protest. "No, no! I am not tired at all—really. I cannot let you do this for me—R. G."

It had been long, Weber reflected queerly, since she had called him that—never after Armiston had come. He smiled at her, gave Armiston a little push.

"Get on—both of you! It's not the first time I've taken double watch—is it, Ta, old friend?"

The lithe Martian grinned, looking at him affectionately. "Indeed not. I am afraid, R. G., that you and I are a bit too tough to kill. It will take more than—*this* to do that, I think. Go on, Ona."

The girl glanced from one to the other of them, hesitating.

Armiston moved forward a little, glance pleading. "Please, Ona."

The girl shrugged, laughed a little shakily. "Three against one—what can I do? I will go."

Armiston caught her hand; the two of them climbed past Weber and the silent Martian, vanished down the narrow ladder, reappeared again below. Weber and the Martian watched until the panel of the entrance lock had closed behind them.

Then a single silent glance of understanding passed between the two men, and both turned as one to their switchboards—from which neither had really relaxed his vigilance while watching Armiston and Ona.

Armiston said, in a low, flat voice: "Ona, I am afraid. I think I am going mad . . ."

*Zinconium—The insulating metal.

He did not look at her. They were in the tower room again, sitting opposite each other at the little metal table. The girl looked at him with wide, softly luminous eyes. Her thin hand came out and touched his fingers, pressed them in a warm, soft grip.

"I know, Bob. I am afraid, myself—always. Who is not—*here*? Even R. G. is a little afraid, I think . . . The brave man, Bob, overcomes fear."

Armiston raised his head and looked at her. For the first time he really saw her as she was; saw the slim, proud liveness of the small body; the aquiline, intelligent little face; the luminous eyes; the glorious crown of sea-green hair . . .

"That's so," he said slowly, dully. "That's so. You're brave, Ona. More than brave . . . Beautiful. Have you ever heard that word before? It is an old word, in Earth's language; but I like it. It fits *you*."

She looked at him queerly, met his straight glance with fascinated, half-troubled eyes. "Am I really—beautiful, Bob?"

"You are," he said softly, and closed his big hand over her small one. "You are—really . . . I love you, Ona."

She drew back from him abruptly, sudden livid terror in her eyes. "You should not have said that! You must not say it! There is no room for love—*here*, Bob . . ."

"There is room for love—everywhere," Armiston said, and came around the table. He caught her in his arms. A long moment was given them of close, satisfying embrace, an ecstatic breath of happiness in a place of sorrows—the first bit of happiness that austere room of metal had ever looked indifferently upon. And the last.

The soft tinkle of a warning bell separated them. Armiston frowned impatiently, and would have swept her back into his arms; but the girl shook her head, slipped away. She went to the wall, where a panel was swiftly opening.

The vagueness of the vibra-screen cleared away, vanished; slowly the image of the caller showed on the little glowing square . . . There was no face. There was simply a half sphere of glinting white glassite, through which was dimly visible a gently throbbing mass of grey, jelly-like substance. The whole mounted on an ungainly tripod-shaped metal mechanism, capable of swift movement upon the flexible metal tentacles it called legs. A metal man, one of the increasing thousands beginning to throng Mars—once a being of flesh and blood, now a great brain mounted on metal. It was the last desperate resource of a dying race; a brain lives very long, and consumes very little food and moisture . . .

THERE was a bright-glinting object inset into the stark whiteness of the head dome, and Armiston suddenly recognized the thing as M-7, Commander of the guard of metal men that surrounded the Tower Station—for protection against the hordes of desert vandals. The grey mass of the exposed brain quivered, and the vibra-screen blurred and shook; Armiston had the uncanny sensation of a voice speaking in his brain:

"M7, Commanding 12th Guard Squadron, reporting. Will you give me audience? I have—news."

The girl pushed Armiston aside, a thin line of worry growing between her pale brows. "Of course. Use lift V-2, Commander. At once. We will await you. Cut off."

"Cutting off," the brain echoed mechanically, and the screen went dark. The girl swung and faced Armiston.

"Something's up. I can tell by what was in M-7's mind. There's trouble—somewhere . . ."

A bell rang warningly. Slowly, a long panel slid back into the metal wall, and the metal Guard untangled his

grotesque body from the crowded little lift car, and came into the room, stood swaying gently before them. The girl snapped a question:

"What is it? There is—trouble?"

The brain in the glassite case quivered; again Armiston felt that curious mental shock. "Yes, High One. Trouble, a little way above us. A raiding party of desert savages attacked the Guard Station at Zee-Boma; they carried it—but not before warning had been sent out. The warning was caught in the signal-room *here*. The vandals have taken a course directly across the Fire Mountains above us. No danger for—*here*, but the 12th Squadron may be ordered to pursue. I thought I would warn you."

"You did right," the girl said slowly, nodding. She stood a moment in silence, thinking. Curiously, Armiston did not question her right to command; she slipped into it naturally.

"We will go with you to the signal-room," the girl said suddenly, making a swift decision. "Come, Bob."

Armiston nodded, followed without question. The queer ungainly thing before them swayed on its flexible tentacles, made an odd mechanical bow. A tentacle whipped out and pressed a stud in the wall, summoning the lift.

Armiston could not keep his eyes off the unblinking impassiveness of the captive brain in the case; strange to think that this metal monster had once been a Martian, as human as Ona or himself! It was a grim prophecy of the future of the Martian Old Race; every year more and more of them, desperate with thirst for water that could not be had, were joining the ranks of the metal men—or swelling the numbers of the savage, maddened hordes that scourged the deserts of the planet. Soon the human races of Mars would be gone, swept away, wiped out by an inexorable nature. How long before the thin ranks of the metal squadrons battled against thirst-maddened desert hordes for the possession of dying cities? . . . Ghastly to think of Ona, lovely and desirable, chained captive in an ungainly body of metal!

The girl caught at his arm impatiently. The panel had opened in the wall before them; the metal guard was motioning with a great tentacle that they were to go down first.

He stepped forward with the girl, crowded close to her in the little metal car. The car sank downward.

Below, a panel opened again into a metal wall, and he and Ona came out into the dimness of the signal-room. There were two of the metal Guards *here*, working silently at giant vibra-screens and audio-detectors, sending and receiving, forming a link in the world-girdling chain of Guard Stations. In one corner the helio apparatus was silent and unmoving. It was not often used, except in cases of extreme emergency.

The panel clicked behind them; Armiston jumped nervously at the gentle forward shove of a metal tentacle. He swung half-angrily on the Guard, but the girl caught his arm, urged him forward.

They stood near the helio apparatus, staring out through the round opening of a small glassite port, watching again the lambent crimson mystery of a Martian sunset. For the first time Armiston found the bleak cruelty of the desert subtly beautiful.

Night, sudden and complete, had fallen over the desert. In *here*, dim and muted by distance, they could hear the soft whisper of a rising wind—a thin, high wind, howling the dirge of dying Mars . . . A queer shock stabbed suddenly through Armiston's brain. There in the distance—had he seen that pin-point of sudden white light cutting the velvet blackness—or was he going mad?

He was not mad. The girl had stiffened suddenly beside him, slim body taut, eyes intense upon something in

the distance. She turned, flung a stream of words at the metal Guard Commander. He came closer, shoved Armiston impatiently aside, stood with that ghastly naked brain held slightly forward—toward the dark blot of the distant mountains . . . The grey substance of the brain was palpitating, stirring—suddenly Armiston was very sick, the room whirling before him.

BEFORE his gaze the thing had turned, twisted—and projected out of the quivering protoplasm of the brain an eye! Armiston met the cold, piercing glance of that eye for a shuddering instant, and turned away, sickened . . . The brain was throbbing again:

"Yes, High One. You are right. There is someone, something out there . . . signalling . . . Using Guard Code. I can read parts of the message. I can get all of it now."

The girl gripped Armiston's shoulder with painful force. He felt her body quivering beside him. "What does it say?"

The brain shook, made a mighty effort. "It says: 'Guard Station, Aie-Tau. To all Guard Commanders, Sector V-4, South: Attacked by raiding party of desert savages. Leaders maddened by thirst . . . Great numbers . . . More coming from hills . . . Afraid—can't hold out much longer. Using last charged—V-Tubes—now. All Guard Squadrons: Emergency call: Aid requested! Urgent!' . . . The message ends, High One."

The girl forced quivering lips to move. "That is all?"

"That is all."

Armiston met the girl's eyes. There was fear in them. He looked at her in surprise. "You are afraid, Ona. Why? What could be worse than—*this*?"

She looked at him queerly. "I am not afraid for myself, Bob. But there are so many—depending on us. So many—who will die, horribly, without the tubes. Three worlds—depending on us, Bob. If anything happens—"

And suddenly he understood—and for the first time uneasiness seized him. They were almost defenseless—and if the Guards left . . .

"What could happen?"

The girl shrugged, eyes uneasy and worried. "I don't know. Nothing, I suppose. But if the Guards go—"

Armiston remembered the metal man, standing silently between them. He looked across at the queer, ungainly metal thing, and felt a sudden respect and unreasonable confidence surge through him at the sight of it. He asked quietly:

"You will have to go?"

The brain quivered; again Armiston felt the shock of a small, soundless voice speaking in his mind. "Yes. It is the Code of the Guard, High One . . . I do not like it. But I must obey. I will leave two here to guard you. You will be safe."

"Of course we will be," Armiston said, looking at the girl. "Of course . . ."

The girl nodded slowly, her eyes troubled. "I hope so, Bob. But if you are wrong—"

The metal Guard Commander was giving swift orders. The helio apparatus began to swing and flicker, swing again, flicker again, back and forth . . . And out on the vast reaches of the desert, small points of white light flickered in answer from night patrols, leaped up sharply under the pale glow of the racing moons swinging across the dark sky . . . Slowly, in ones and twos and threes, the patrols trickled in from the desert, formed in taut, ordered rows below, at the ground-entrance of the tower.

The Guard Commander stopped giving orders suddenly, snapped terse commands at the two Guards in the signal-

room. He turned, and stood before Armiston and the girl. The brain quivered.

"I must go now, High One."

The girl nodded, her straight eyes facing the ungainly metal bulk. "Yes. We will be safe until you get back, M-7. Good hunting!"

The brain shook queerly. "Ai!"

The Guard Commander turned, walked slowly to the opposite wall, extended a flexible tentacle to press the stud for the lift car. A panel slid silently open; the metal thing stepped into the waiting car, dropped downward out of sight. The panel closed slowly.

Armiston and the girl stood a long time at the lookout port, watching the burnished metal forms of lithe-swinging squadrons dwindle into nothingness against the dark background of the distant hills . . .

They were silent and abstracted, going up to the tower room in the lift. Neither thought of sleep. Some indefinable sense of impending danger drove them from the tower room downward again to the entrance lock of the room of the rays. Swiftly Armiston donned heavy metal armor, slipped the crimson mask down over his face; waited in silence until the girl stood beside him at the outer edge of the lock. Somehow, Armiston's fear was gone.

They stepped out together onto the catwalk leading down into the vast room, clambered past the jutting bulk of clamoring machinery, moved upward slowly into the control towers—and presently stood panting beside Weber and the Martian.

Weber flung them a quick, searching glance as they came up. His hands played swiftly over a narrow keyboard inset into one corner of the giant switch panel, locking home the automatic controls. Ta Rigo did the same, and presently stood beside them.

"What is it?" Weber demanded, lines of anxiety deepening in his face. "Something's up?"

"Yes," the girl answered. "The Guards have been called away. There's been an attack to the north of us—desert vandals. M-7 left us two Guards . . . R. G.—I'm afraid."

Weber looked at her, flashed a quick, worried glance from Armiston to Ta Rigo. He said slowly, softly:

"So am I. Something's doing in Korna. And if that wasn't enough to worry us, we get *this*!"

"What are you running?" the girl asked, eyes suddenly widened. Weber answered tersely:

"Ninety-five Ac-9 every minute. We'll leave control to the automats for awhile . . . We'll have to. I've got to talk to Korna; they'll be trying to get us, likely enough. Let's go."

Armiston and the Martian nodded, followed swiftly in the path of the older man, who was moving side by side with the girl, and talking rapidly. They reached the lock, stripped off the cumbersome, ungainly insulation-suits, threw them aside with the heavy crimson masks.

CHAPTER III

The Great Sacrifice

TOGETHER, they crowded into the lift car, rode upward swiftly to the signal-room . . . The panel closed behind them; Weber shot a quick, keen glance over the dim outlines of the great room; took in the steady, certain movements of the two metal Guards in one corner; rested on the huge bulk of the darkened center vibra-screen.

He swung on the three behind him. "Stay here . . . No, you'd better stand by the lookout port; there *might* be something to see . . . Ona, you have keen eyes. Use them. I'm calling Korna."

He strode forward, flung himself impatiently into the narrow control-seat of the great screen, worked rapidly at banked rows of control studs. The screen glowed, swirled, steadied into focus; a great brightly-lit room, crowded with whirring machinery, came into view; a red light flashed insistent warning that both visual and audible connection was wanted with Korna.

The exchange-room vanished; Weber met the keen black eyes of Travisgane, Councillor in charge of Communications. Worried lines were carved deep into the Councillor's high white forehead, a kind of horror burning behind his eyes . . .

"Weber! Thank God, it's you! I've been trying to get you for hours! Your center-screen's been dark. Anything wrong?"

Weber hesitated, shook his head slowly. His eyes never left the other's tired, harassed face. "No, I suppose not. Nothing definite. But M-7's been called away; a raiding party's struck across the Fire Mountains. All Guard Squadrons in this sector have been called out. I suppose we'll be safe enough."

The Councillor did not look as if he were even listening.

He nodded; and suddenly the half-mask of impassive restraint dropped away from him, and Weber saw through to the despair and weariness beneath.

"There's trouble enough here, Weber. Gods of Space—the horrors I've seen this last hour! Weber, it's up to you—and Ta Rigo. We'll go under if you can't keep up that flow of 90 AC-9 per minute; even that just barely covers the situation . . . If it gets any worse . . ."

"Good God, man!" The words burst from Weber in a short, quick gasp of dazed amazement. His eyes bored into the other with a fiery intensity. "You don't mean—you can't mean—another wave of Cancer Four?"

The Councillor's shoulders slumped a little; he nodded wearily, something of despair in the gesture. His eyes looked dazed.

"But I do. Look."

He made a swift, impatient motion of command; the screen blurred, swung, flickered; and Weber stared with sickened eyes at a scene of unthinkable horror. Section after section, ward after ward, of the great Hospitalization Centres in Korna, packed to overflowing with warped travesties of the human form, utter suffering mirrored on unending ranks of cratered, flesh-thin faces . . .

The screen blurred again; and before Weber's eyes the ethereally beautiful, unearthly spires of Brez and Tela, twin polar cities of Mars, grew into view, covered the screen. They showed streets packed with a queerly hopeless, despairing multitude, dying by inches, toppling forward in twisted attitudes of death . . . And above, the airplanes crowded with spinning, driverless rockettes, plunging down from the heights in screaming wreaths of flame, loaded with cargoes of the dead.

"Enough, for God's sake!" Weber cried, and put his hand up to shut out the sight; the screen blurred again, and presently the Councillor was back, eyes grim and tortured.

"It's come again. You've got to keep supplying us with AC-9 . . . I won't think of what would happen if you fail—even for an hour. It would be hell, that's all. If this *could* be worse!"

"I see," Weber said in a choked, hushed voice. "I see. We won't fail, Councillor. I promise you that; I swear it. We won't fail. Cut off!"

"Cutting off," the other echoed, the shadow of relief coming into his strained features. Weber had a last, short vision of a weary travesty of a smile twisting the grim lips.

He cut off the last of the screen controls with impatient hands and swung out of the operator's seat, stood up, turned. The girl was standing beside him, face pale as death, eyes dazed.

"You saw?" he asked gently, touching her shoulder.

She nodded dully, something of unutterable despair in the movement. "I saw, yes. Oh, R. G.—"

She swayed, toppled, faintness rising between her eyes; he caught her in a strong, steady grip, put her on her feet again.

"Steady on, Ona. You've got to grin and bear it, my dear. We can't fail—*now*."

"No," the girl whispered softly, "No." She made a sudden short, jerky gesture toward the lookout port, where Armiston and the Martian stood frozen, staring out over the desert.

"Out there—R.G. We saw—something."

WEBER caught her arm in a sudden fierce grip. "You saw something?" He shoved her roughly aside, hurried to the port in short, quick steps; stared out.

Far distant yet, just topping the crest of scarlet and dunes silvered by the light of the racing moons, a vague, dark, rippling mass was flowing rapidly over the desert, sweeping down upon the tower. Weber strained his eyes, leaned forward—and suddenly felt despair crush him in an unrelenting grip. Vandals! A raiding party of desert savages, maddened by thirst, coming to attack them!

He swung suddenly away from the port, shook his spinning head in a dazed effort to think. Then he caught Armiston and the Martian in a savage grip.

"Come out of it, you two! We can't let them take us! I promised . . ."

Armiston stared at him helplessly. "But what will we do? What *can* we do? We've got nothing to fight with—except that old projector by the helio there. They'll outrange us, even with that. What can we do?"

Weber's face was a granite mask of determination. He kept seeing row after row of suffering, distorted creatures, calling in vain for the thing that would save them. And the tower, gutted and overthrown, its mighty mechanisms silent, strewn over the desert in twisted wreckage, burning in ato-furnaces to furnish fire-light for howling hordes of thirst-maddened things that had once been members of a proud, age-old civilization.

"We'll fight," he said fiercely.

"We'll fight with what we've got—and beat them. We've got to."

The girl moved suddenly, spoke. "An idea, R. G.: why not use our insulation-armor, when we—go out there to meet them? They'll find it hard to reach us through inches of entonium! And we can use the projector."

"You've struck it!" Weber cried exultantly, a faint glimmer of hope coming into his voice. "Bravo, Ona! And we've got our two Guards here to help us!"

He swung, faced the two metal men who stood impassively waiting in one corner of the room, their brain cases held slightly forward. He pointed out through the port to the advancing dark mass, now swiftly growing larger, like an ominous storm-cloud about to burst and overwhelm them.

"We're going to fight, my friends. Out there. We four will handle the projector and you have your hand weapons. Use them. What more could anyone want, and be reasonable?"

The brain of the nearest rippled in sardonic approval of the other's grim humor. "Ai! May we find—good hunting!"

Weber laughed then, a little queerly; the first time he had laughed in long years. Since a certain one of far-

off Earth had told him that there could no longer be anything between them, and bitterness had bitten deep into his brain . . . He was filled suddenly with a heady wine of recklessness; come what might, they would give the devils a fight!

A little band of six figures crawled across a molten sea of rippling desert. In the lead four metal-armored, heavy-moving beings in human form, taut with a certain fiery eagerness for battle, strong with desperate determination, fingering the multiple controls of the glimmering, sharp-nosed ionic projector. Following on swift, lithe tentacles of metal—two ungainly, monstrous things, topped by glassite cases in which rested two naked, throbbing brains.

Awaiting them on the crest of the dunes was the enemy. A silent, huddled horde of savage creatures, begirt with fragments of metal armor, blunt-featured, heavy-browed, fingering crude flame-belching weapons of Earth's iron and steel. Here and there among them a squat, compact little heat-gun, taken by battle prowess from some Guard Station. It was a deadly, complacent little weapon, capable of throwing one hundred hissing shells of incandescent flame every minute in fiery flight. And all in the great horde with bodies and faces once cultured and clean-lined, but now marked by the ravages of heat and sand and the bitter cold of long nights under the stars—and parched with an overwhelming thirst.

Savages, Armiston thought queerly, climbing up to battle at the side of the tight-faced girl—savages of a strange planet, warring with madmen gone berserk in defense of their beloved science, fighting to uphold a dying civilization. Surely the strangest battle ever witnessed by the impassive, cold-white racing moons above!

A heat-gun chuckled suddenly on the crest of the sand-hills, and sent a sobbing stream of incandescent fire pouring down over the dunes; the six metal-armored figures walked on with contemptuous strides, ignoring the tingling red glow beginning to spread along tortured metal. The heat-gun stopped and died as suddenly as it had begun firing, and one of the metal Guards halted with grim purpose in the sand. He lifted a tiny silver capsule in a lithe tentacle—hurled it full into the heart of the crouching horde on the hills above . . . An atomic bomb!

THE capsule burst: silver-and-green fire seemed to mushroom up out of the billowing waves of sand, and brush away with hungry fingers a dozen ranks of savage figures. A great gap opened in the lines of the raiders; they fell back a little, dazed and stunned by that awful concussion.

Weber's face glowed with an unholy light; he chuckled queerly, the sound a dry, rasping rattle in the darkness . . . Armiston, his face dazed and horror-stricken, looked at him unbelieving eyes. Strange things, battle did to men!

Slowly the gap in the dark mass above was filled; and suddenly, with an utter abruptness that shattered pregnant stillness, pandemonium burst over the desert. The horde broke up into a billowing, howling mass of madmen. They poured down in incessant streams upon the six who stood back to back in the center of the maelstrom, and fought with frantic, deadly coolness.

Three times the hungry waves swept over and half engulfed the six; and three times they were hurled back again in dismembered bloody fragments—impaled on the spitting electron stream of the projector.

The third time was the last. The horde was afraid and uncertain suddenly—and as suddenly retreated in

wild rout. Weber and Armiston knew that it was victory.

Victory—but at a price. And what a price! Almost greater than Weber had been willing to pay. Ta Rigo was gone. And Armiston was standing dazed beside a great gaping crater in the sand, looking down at the fused mass of what had been two metal men, once throbbing with tenacious life . . .

Ona was crumpled up on the sand, sobbing over the tortured fragments of a man's metal armor. Weber leaned down slowly, and brought her to her feet, shook her gently.

"Carry on, Ona. It's what he would have wanted you to do."

"Yes," the girl said dazedly, the light gone from behind her eyes. "Yes. I won't crack up again, R. G. You can count on that. I'll—carry on."

"Good girl!" Weber said huskily, and turned away to hide the sudden moisture in his eyes. Armiston stood watching them both in a strange abstraction, his mind caught in a maze of horror . . . Queer, how hard they had fought for life—those three condemned! Queer—how bitterly they had struggled to keep from giving it up! Queerer still that he and Ona and Weber still wanted to live—still ached to keep the feeble spark within them burning . . . The primal instinct of protoplasm!

"While there's life, there's hope!" How long ago had Weber said that? Ages ago, certainly; in some other life. Not *here*. He laughed suddenly, with a wild note in the dry, rasping sound. Weber looked at him sharply, came over beside him.

"You were great, Bob. We've won . . . Pull out of it! We've got to carry on. For the sake of others. Help me take Ona back to the tower. I don't think *they* will try again, but there is a chance . . ."

Armiston nodded, fought off a mad desire to scream, laugh, do anything to relieve his insufferable tension . . . He caught the girl's arm on the other side from Weber, and together, with the girl between them, they made it slowly back to the tower. Ona walked unaided through the ground-lock, moving like an automaton, her dazed eyes staring straight ahead.

They took the lift up to the signal-room, stepped across the threshold of the dim chamber in silence, and in silence took places by the lookout port, staring out over the desert. Out there the shattered ranks of the savages had already begun to trickle together again, to reform slowly, very gradually. Thirst, Armiston thought suddenly, is a mighty welder.

Weber made a little inarticulate sound suddenly, moved toward Armiston, staggered, and toppled forward on his face. Armiston, cold horror chilling his brain, caught him up and laid him out carefully on a narrow bench. He felt under the light tunic: there was a raw, charred gash under his left armpit, cutting across the heart: a heat-beam had pierced his armor, and the wound had gone unnoticed in the fever of the battle. The girl came over slowly, met Armiston's eyes.

"Bad?"

Armiston looked at her for a long moment. "Very bad, Ona. I hate to say it—but he's through. We can make him comfortable . . ."

The girl brought bandages, and a little of their precious water. Together, they cleansed and covered the gaping wound, chafed Weber's pale cheeks with cold, nervous hands. He came around, opened his eyes slowly. There was a terrible burning intensity in them. He caught Armiston's wrist.

"Tell me, Bob—and don't be a sentimental fool. How bad is it?"

Armiston looked at him with unwavering eyes, slowly nodded. "You asked for it. I'm afraid—you're through."

Weber fell back on the bench, a queer despair coming behind his fine eyes. "Good God! And I promised—Armiston! Are *they* coming back?"

ARMISTON was hardly listening; his eyes had gone past the other, were staring with a tight, strained glance through the thin glassite of the lookout port . . . Out on the desert a white pinpoint of light was beginning to wink sardonically: a sending helio!

"Ona—look!" Armiston said suddenly, tensely. "Over to the right a little more . . . There. Do you see it? A helio. Sending. Can you—read the message?"

The girl stiffened beside him, strained forward, eyes tense upon the distance. "Yes. It is coming through clearly now. It says: 'Commander, the Tower. We would have you know that there is no escape for you. There is no help coming. M-7—was victim of a hoax. It was our signals he caught. He is too far away to return in time to save you . . . We are merciful. We offer you a chance to live. We know you have much water. Give it to us—and you live. Refuse—and we take it . . . Answer at once. Message ends. Grot, Leader, the Freedmen.' That is all, R. G."

A sudden silence fell over the three of them. The girl's mirrored an inward struggle, fierce but silent. The instinct of life was strong in them all—and Korna was far away . . .

Weber's eyes opened; by a supreme effort of will he brought himself erect on the bench, met Armiston's eyes in a long, grave glance. "Armiston, can you handle the helio?"

Armiston hesitated an instant. The girl was watching him with almost pleading eyes . . . He nodded. "Yes."

"Send this message—as our answer. 'You are wrong. We have only a little water. Barely enough for ourselves. And there are many who will die—if we die. We have nothing for you. Go away and leave us . . . ' Message ends. Send it!"

His eyes met Armiston's still hesitant glance; he nodded imperiously. "Hurry, Armiston! They will be waiting."

Armiston shrugged, looked across a long moment at the girl, and went slowly to the helio. The great mirrors began to swing and flicker, swing and flicker, catch up and condense the narrow beams of light released from crowded photo-storage cells, send pulsing lances of white glow out over the sand . . .

Far out on the desert the white point of answering light leaped up again, came and went, came and went . . .

Armiston, very white, said slowly: "They refuse. They give us five hours to—reconsider. After that—they attack."

And then the girl spoke, the last spark of light gone from her eyes, her voice a dry whisper. "But we will stop them. R. G., listen. I have a plan. It will work—I hope . . ."

Weber's eyes opened again; by a tremendous effort of will that brought sweat in huge beads to his forehead, he sat up on the bench, fixed the girl with a hot, impatient glance.

* * * *

"Quick then, Ona! I—have not long. But I can work while—I can. I will try hard to live until you no longer need me . . . What is your plan?"

"This," the girl said slowly, and she did not meet Armiston's eyes. "One of us will take that suit of insulation-armor there, put it on. We will charge the projector directly from the storage cells of the generating room in

the tower. It is dangerous, I know; but it is—the one way left to us. Charged with the power those great cells will give it, it can destroy all of the enemy . . . One of us will take the projector and go out to meet them. That is my plan."

"No!" Armiston cried in horror. "No! You're mad, Ona!"

Weber swung on him fiercely. "Quiet, Armiston! She is right. It is—the one way out. I will take it, of course. Get the suit . . ."

Armiston's lips opened to protest; and closed before the terrible intensity in the other's face. Silent, he helped the girl pick up the heavy suit, bring it near the bench. Muscle cords bunched and throbbed under the skin of his throat; slowly he rose, stood swaying on unsteady feet. Armiston extended a quick arm.

Weber struck it down fiercely. "No, man! Can't you see? I must—do it alone."

He gasped suddenly, the breath rattling in his throat. He took a single long, wavering step toward Armiston and the girl—and toppled face downward to the floor . . .

The girl was the first to reach him. She straightened up slowly as Armiston caught her shoulder, met his glance.

"He's gone?" the man asked, and read the answer in her eyes.

"Yes. He's gone . . . He said: 'Carry on, you two! I promised—'"

ARMISTON spoke fiercely his brain throbbing. "We will, R. G., we will! I think you know that, wherever you are now . . . It means of course, Ona, that I've got to take his place. We can't fail—*now*. We've got to go through . . . The projector's ready?"

"Yes," the girl said slowly. "We have an hour before they attack . . . The projector is ready."

"I will go then," Armiston said, looking at her for a long moment, drinking the vision of her loveliness in, as if imprinting it forever upon his mind. "We have an hour before they'll expect our answer. They'll get one—but not what they think. You know what you have to do when I—wipe them out . . . You're certain about it all?"

"I am," the girl said in a flat, dead voice: "I am to call, Korna; and have them send relief at once; then I am to lock the automats and hold out until the relief—comes. Is that right?"

"Yes," Armiston said, very close to her. "Yes . . ." He caught her for a long instant in a close embrace, brushed his lips along a stray tendril of hair.

"And that's goodbye, Ona. Remember—I loved you."

The girl choked back a dry sob. "Good-bye—Bob. Remember I said there was no room for love—*here*? I was right . . ."

"No," Armiston returned slowly, a glorious vision rising in his brain, "You are wrong. There is room for love—everywhere."

He pressed the stud in the wall that summoned the lift. The panel opened slowly before him; he went in, sank swiftly downward. The panel closed softly—closed upon the dry, choked sobs of the girl standing alone . . .

Armiston strode rapidly over the desert, the heavy little projector held easily before him. A curious lightness and freedom filled his brain, rocked his soul—blotted out even the knowledge that the tremendous power now held leashed in the squat bulk of the projector, that was shortly to be released to destroy both the enemy and himself . . . At last he was free from fear. And that was all that mattered.

He topped the crest of a sandhill, and came slowly to a stop. Almost upon him, gathered in compact, close-ranked masses, the hordes of the Freedmen crouched

silently, watching him with many eager eyes . . . He was so close that he could see the leader, a splendid savage brute, panting in great gasps for breath, the parched tongue lolling in the half-open mouth . . . Without a sound the hordes charged.

Calmly, as if he were viewing a record-film of some long-dead happening, Armiston crouched for an instant against the faint glow of the racing moons above, his cool grip tightening about the squat bulk of the quivering projector.

He pressed the studs. Great bursts of searing white light leaped out all around him, swept out in a vast half-circle that engulfed the horde in an instant dissolution of flaring force, rebounded with a thunderous concussion upon Armiston's metal armor—and exploded in a searing wave of white flame . . . Armiston was gone.

Behind, high up in the towering silver bulk of a great tower, the girl watched with fascinated, horror-stricken eyes, her face pressed hard again the glassite of the lookout plate . . . And slowly she turned away, a queer, hard determination written in the set lines of her face.

Moving like an automaton, she crossed the floor of the signal-room, sat down at the controls of the vibrascreen, and began to build up visual and audible connection with Korna . . . Presently the exchange gave it. The face of Travigane, the Councillor of Communications, looked out at her with questioning eyes.

"Ona! What is it? Nothing is—wrong?"

The girl looked at him dully. "They are all gone except me. They are all gone. All gone . . ."

The Councillor said frantically: "Ona! Ona! Listen to me! Tell me what has happened! Weber and Armiston!"

"Dead," the girl said in a flat voice. "Dead. Haven't I told you? They're all dead—except me. Ta Rigo, and R. G., and—Armiston . . . Send relief as quickly as you can. I am locking the automats. You've nothing to fear; they will supply you until you can send out some—fools, to take our places. But hurry; automats aren't safe after eleven hours . . . They can't hold dead center. You understand?"

"Yes," the Councillor said in a stricken voice, "Yes. All dead! My God! What happened?"

"A trick," the girl muttered, "A trick . . . Trick to get M-7 away and then attack here. They didn't win, though; couldn't beat R. G.—and Armiston. Armiston killed them all before he died . . ."

"They were brave men," the Councillor said softly, a little brokenly. "But you are brave too, Ona . . . We are winning the fight here; if you can keep up the supply of AC-9. Carry on, girl!"

The girl looked at him a little stupidly. "Yes . . . That's what R. G. said, before— You'll send the relief?"

The Councillor nodded. "Of course. In five hours. You can hold out till then?"

"Yes. I am locking the automats; they will last longer than that. I'll wait until the relief comes. But—hurry."

"Yes," the Councillor said. "Yes . . . Cut off."

The screen went dead. Slowly the girl got up from the control-seat and went to the lookout port, stared out at the bleak, hard cruelty of the desert, bitterness and hate in her eyes. The desert had won. The desert always won.

After a long time a sound invaded the soft silence of the room; distant, muted, but still the rising thunder of a fleet of rocket-ships slanting down over the hills . . . The relief.

The girl watched until the roaring ships were dimly visible, silvery blobs on the horizon; then she rose slowly and went down to the ground lock; set the automatic controls to open in three minutes . . .

And after that she went up in the lift to the entrance-lock of the Room of the Rays—and entered, without armor.

Slowly, every movement a queer torture under the unchecked impact of swirling short-rays, she moved down the narrow catwalk, reached the control towers. She passed them by unheeding, and walked grimly, doggedly into the nimbus of white flame that lived and grew about the surface of the tubes.

Slowly, very slowly, her body wavered and grew vague of outline; slowly, very slowly, it vanished into the cold embrace of the white flame.

Outside a thin wind rose over the desert, whispering . . .

THE END

Our Sun==As Others See It

Our own favorite star is so bright that it is almost impossible for us to imagine a universe where it is not the dominant luminary.

Yet, travel a few light-years away and our Sun becomes invisible to the eye while other stars of apparently feeble light are shining with apparently undiminished lustre.

If the majority of the stars we see on a clear night are circled by inhabited worlds (which astronomers now doubt) there are very few of these from which our sun is a conspicuous object; and none from which even our largest planet, Jupiter, could be detected.

From outside the galaxy our sun would be invisible, even with telescopic aid, and all of its bright neighbors except one—the name of which is perhaps familiar to readers of Wonder Stories.

Read this interesting article in the

JULY ISSUE OF

EVERYDAY SCIENCE AND MECHANICS